

December 12, 2003

Patricia Daniels
Director, Supplemental Foods Program Division
Food and Nutrition Service, USDA
3101 Park Center Drive, Room 520
Alexandria, Virginia 22302

Re: [RIN 0584-AD39] Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions to the WIC Food Packages 68 Federal Register 53903, September 15, 2003

Dear Ms Daniels:

General Mills is a Delaware Corporation with its general offices at No. 1 General Mills Boulevard, Minneapolis, MN 55426. General Mills is a major packaged-food manufacturer engaged for over 60 years in the development and production of food products including flour, ready-to-eat-cereals, cake and other dessert mixes, snacks and numerous other products.

General Mills supports the goals of the WIC Program in several ways. We offer fifteen cereals that meet Federal requirements for use in the program. In addition, we support nutrition education by annually providing over 1.5 million complimentary non-branded nutrition education materials available for distribution in WIC clinics. General Mills also underwrites WIC educator meetings and other nutrition programs.

Executive Summary

Since its beginning in 1974, the WIC Program has earned the reputation of being one of the most successful Federally-funded nutrition programs in the United States. Collective findings of studies, reviews and reports demonstrate that the WIC Program is cost effective in protecting or improving the health/nutritional status of low-income women, infants and children. The WIC program was conceived as supplemental feeding program intended to provide specific nutrients determined by nutritional research to be lacking in the diets of the WIC population.

General Mills believes one of the program's key benefits and reason for popularity among participants is access to a variety of nutritious foods, including iron-fortified cereals. The benefits of consuming fortified cereals are numerous, making cereal an integral part of the program's success. It provides essential nutrients for the health of women and children including iron, calcium, and B-vitamins including folic acid. In addition, eating cereal has been associated with a lower Body Mass Index (BMI) in women and children. Cereal has multi-cultural appeal, has broad consumption and is widely available. Eating breakfast offers positive benefits for learning and performance. Because of these benefits, fortified breakfast cereal should remain a cornerstone of the WIC food package.



The WIC program was conceived as supplemental feeding program intended to provide specific nutrients determined by nutritional research to be lacking in the diets of the WIC population. General Mills believes that the program should continue to offer foods to address iron, calcium and vitamin C. General Mills strongly encourages that the WIC program consider folic acid and zinc as target nutrients for the WIC population based on our analysis.

General Mills believes the quantity of cereal per participant should remain at 36 oz. or potentially increase due to the importance of grains in the diet, the eating patterns of the population, the current scientific data indicating that iron deficiency is still prevalent in toddlers, preschool children and females and the fact that cereal is the most nutrient dense item in the food package. Ready-to-eat, fortified cereals in the WIC food package provide iron to this population in a form that is convenient, relatively bioavailable, comparatively inexpensive, and easy-to-use and store. Fortified ready-to-eat cereals provide children and women with an important overall nutrient edge with minimal fat, saturated fat and cholesterol. The consumption of cereal is associated with healthier body weight.

General Mills believes that the WIC food package should find ways to address cultural differences while bearing in mind its mission of delivering target nutrients through food as the vehicle. General Mills supports the provision of offering options to WIC participants who are not able to consume certain foods for allergen reasons. While strict avoidance of the allergy-causing food is the only way to avoid a food allergic reaction, eligible WIC cereals offer a variety of grain options to allow for participants to simultaneously address food allergies and a key health issue - iron deficiency anemia. General Mills supports the offering of soymilk to address nutritional and cultural needs of the WIC community. Soymilk serves as an alternative to milk for segments of the population who for either cultural or nutritional (allergies) cannot consume cow's milk. General Mills does not support the offering of other grain products like breads, rice and tortillas because these grain products cannot match the nutritional contribution of fortified cereal.

General Mills believes strongly that potential changes in the food package need to be evaluated relative to the current package and the overall mission of the program. Authorizing legislation requires that the supplemental foods provided by WIC contain nutrients known to be lacking in the diets of the target population and not intended to provide a complete diet. A shift from the supplemental nature of WIC to a food-based program would jeopardize its mission and its distinctive characteristic that sets WIC apart from other food assistance programs such as Food Stamps. Therefore, changes in the food package should nutritionally outperform the current offerings, should address specific consumption issues and deliver the same benefits at equal or better cost.

The following comments provide greater detail of General Mills' position and rationale on the questions posed by the agency.

I. Elements of the WIC food package remain the same or change (Questions 1-3)

The WIC food package includes foods high in five target nutrients - protein, iron, calcium, and vitamins A and C. These nutrients have been shown to be consistently lacking or needed in extra

amounts in the diets of the WIC population. Fortified breakfast cereals originally were and continue to be an important component in the WIC food package specifically for their iron contribution and should remain a key part of the WIC food package. Ready-to-eat, fortified cereals in the WIC food package provide iron to this population in a form that is convenient, relatively bioavailable, comparatively inexpensive, and easy-to-use and store.

General Mills believes strongly in the nutrition benefits that fortified cereals provide to WIC participants. Evidence suggests the iron-fortified cereals make a difference. Low-income children not enrolled in the WIC Program have lower iron intakes than those enrolled. They also have a higher prevalence of anemia. The Centers for Disease Control (CDC) Pediatric Nutrition Surveillance System data from 1980 to 1992 indicates the anemia rate among children at the WIC six-month recertification is 16% lower than the rate at the initial WIC screening. CDC also reported that the overall rate of anemia declined from 7.8% in 1975 to 2.9% in 1985 among 500,000 children enrolled in WIC (1). This improvement is credited to the general improvement in iron intake among infants and children, and to the specific effect of public health nutrition programs such as WIC.

Currently, ready-to-eat cereals are the largest single source of 18 of 27 nutrients in the U.S. food supply (2). Fortified cereal is the significant contributor of iron in the WIC food package. Iron is not the only benefit of fortified cereals to WIC participants. Fortified ready-to-eat cereals provide children and women with an important overall nutrient edge with minimal fat, saturated fat and cholesterol. Breads, rice, commeal and many other grain products cannot match the nutritional contribution of fortified cereal. Compared to other grain products, fortified cereal is the most nutrient dense grain product (Table 1-2).

The CDC Morbidity and Mortality Weekly Report for October 11, 2002 on a report titled: "Iron Deficiency-United States, 1999-2000," stated that based on the National Health and Nutrition Examination Survey (NHANES 1999-2000) iron deficiency remains above the Healthy 2010 objectives of 5%, 1%, and 7% for toddlers, preschool children, and females aged 12-49 years, respectively (3).

A 1998 study in the journal *Pediatrics* indicated that fortified cereals are the number one source of essential nutrients in a child's diet, like iron, zinc, vitamin A, B-vitamins and calcium. Iron is an essential component of red blood cells (4). Zinc and vitamin A are essential to children's growth and development. The body produces energy with the help of B-vitamins. Folic acid is important for healthy blood cells and helps decrease the risk of neural tube defects.

Fortified breakfast cereal is usually consumed with milk, thereby contributing to intake of calcium. In addition, many ready-to-eat cereals are now fortified with calcium, which builds strong bones and contributes to a healthy nervous system. Fortified breakfast cereals also supply significant amounts of vitamin C, a WIC target nutrient that helps form and repair cells and is important for a healthy immune system. Vitamin C can also help increase the absorption of iron when consumed in the same meal.

Childhood is an important age for developing healthy eating habits that last into adulthood. By establishing the habit of eating breakfast among children participating in WIC, children are more

likely to continue that habit later in life. In addition, children are more likely to eat breakfast when ready-to-eat cereal is offered.

By including ready-to-eat cereals in WIC, breakfast consumption is encouraged hence ensuring healthy habits are started before school age. Skipping breakfast can compromise children's intake of essential nutrients like calcium and may adversely affect cognitive function and performance at school (5). Compared to children who skip breakfast, children who eat breakfast:

- Are more likely to get the nutrients they need each day, like calcium and B-vitamins.
 (Studies have shown that those who skip breakfast fail to make up lost nutrients throughout the day.)
- Are less likely to miss class, be tardy, or report they are sick
- Are able to focus and learn better at school
- Have better muscle coordination
- Have more energy
- Have fewer behavior problems at school

The most comprehensive study of the impact of breakfast on learning in Minnesota elementary schools showed that eating breakfast had significant positive effects on learning (6). Student attentiveness in class increased, discipline problems were cut by as much as 50%, math scores increased by as much as 16% and reading scores increased by as much as 10%.

Children aren't the only ones who benefit from eating a cereal breakfast. Adults who eat breakfast:

- Have more energy and ability to concentrate
- Make fewer mistakes
- Improve their mood
- Maintain body weight
- Are more likely to get adequate amounts of the nutrients they need

In addition, other grain products, like bread, do not provide the same level of nutrition value per dollar *(Table 3)*. Cereal economically delivers the key nutrient, iron and is a significant source of other key nutrients lacking in the diet.

WIC has thrived for more than twenty-five years because of its unique approach among the U.S. Department of Agriculture, state public health agencies and the broader public sector, including food companies. This approach gives participants who might otherwise not be able to afford to, the ability to consume popular, attractive, nutritious products while meeting important nutritional needs of this unique population. One of the program's strengths in promoting healthy eating is access to nutritious foods including favorite brands that mothers want to buy and children want to eat. Without choice, consumption of foods that deliver key nutrients has been shown to decline, undermining both the purpose and the success of the program. An example of this is in the cereal category where all cereals are not created equal. The difference in taste and in brand name versus generic cereals is readily identifiable and more easily recognized by a child's sensitive palate. Experience shows that when only generic cereals are offered, some mothers forgo buying breakfast cereal completely, feeding children less nutritious alternatives or no breakfast at all. Consumer research suggests others buy the generic alternative but pass it along

to adults in the household who are not WIC eligible. Consumer research also suggests WIC participants, like the general consumer population, are particularly loyal to brand names in certain food categories. Cost containment efforts that include replacing branded products with private label or reducing selections and eliminating choice significantly limits product choices and availability to WIC recipients. It is important that WIC participants enjoy the products on the food package if indeed they are to develop a lifetime of healthy eating habits.

The authorized WIC food package currently includes 36 oz. of iron-fortified cereal per month. Given the broad landscape of cereal package sizes, 36 oz. provide the flexibility of choosing several package combinations and ensure that the cereal allowance is met without shortchanging WIC participants. When the WIC program was first initiated, the intent was to supply WIC participants with 1 oz. serving of cereal per day to help WIC participants meet their iron requirement. In fact, almost one third of the current iron intake of children 2-5 years old comes from ready-to-eat cereal (7). General Mills believes the quantity of cereal per participant should remain the same due to the importance of grains in the diet, the eating patterns of the population, the current scientific data indicating that iron deficiency is still prevalent in toddlers, preschool children and females and the fact that cereal is the most nutrient dense item in the food package (Table 4).

Based on USDA's Continuing Survey of Food Intakes by Individuals (CSFII 94-96), the WIC eligible population consumes a significant amount of cereal as part of their diet (8). 73% of children 2-5 years old consume ready-to-eat cereal at least once in two days. 33% consume ready-to-eat cereal both days. The average amount consumed is 33g of cereal per eating occasion; as a result WIC children would finish their cereal month allotment at the end of the month, suggesting that 36 oz. of cereal is just enough. For women, 35% consume ready-to-eat cereal at least once in two days and the average amount consumed is 55g of cereal per eating occasion. Given these eating patterns WIC women would finish the month allotment of cereal within 15-20 days if eaten everyday. Results from The Adolescent WIC Participants Study - a national survey of adolescent women enrolled in the WIC program showed that WIC adolescents generally reported that they or their children actually use the WIC foods they receive and that they frequently desired to receive greater quantities of WIC food, among these was cereal (9). Consequently, the amount of cereal received by female participants is just enough or could actually not last the entire month.

Z

II. Nutrients established as priority nutrients for each category of WIC (Question 4)
Data from National Health and Nutrition Examination Survey (NHANES 1999-2000) shows that iron deficiency remains above the Healthy 2010 objectives of 5% and 1% for toddlers and preschool children respectively. In addition, NHANES 1999-2000 dietary intake data demonstrates that a significant percentage of children aged 2 to 5 years consume below the recommended level for calcium and folate (10). These levels are based on analyses using the Estimated Average Requirement (EAR) from the Dietary Reference Intake (DRI) Nutrient Reports. These figures become significantly more pronounced in non-cereal eaters versus cereal eaters. For calcium, 46% of non-cereal eaters consume below the recommended level versus 32% of cereal eaters. Over 20% of non-cereal eaters fail to meet their recommended folate requirement; this number drops to 5% in cereal eaters. Intakes of vitamin C and zinc show similar trends, whereby cereal eaters are more likely than non-cereal eaters to meet their

requirements. Virtually all cereal eaters meet their recommended iron requirement; this is not the case for non-cereal eaters. Given these findings of children's current nutrient intakes, General Mills believes that for WIC children to achieve healthy physical and cognitive development, the program should continue to offer foods to address iron, calcium and vitamin C. General Mills strongly encourages that the WIC program consider folic acid and zinc as target nutrients for this WIC population.

Data from NHANES 1999-2000 shows that iron deficiency remains above the Healthy 2010 objectives of 7% for females aged 12-49 years. In addition, NHANES 1999-2000 dietary intake data demonstrates that a significant percentage of women aged 18-34 years consume below the recommended level for calcium, iron vitamin C, folate and zinc. Almost 70% of women consume below the recommended level for calcium, more than 50% of women consume below the recommended level for vitamin C and folate, over 20% fail to meet their recommended iron intake and over 30% of women are below the recommended zinc requirement. Furthermore, 75% of female non-cereal eaters consume below the recommended level for calcium compared to 46% of cereal eaters. Over 60% of non-cereal eaters fail to meet their recommended folate requirement; this number drops to 14% in cereal eaters. Over 25% of non-cereal eaters do not meet their iron requirement compared to nearly all cereal eaters that meet their iron requirement. Intake of vitamin C and zinc shows similar trends, whereby cereal eaters are more likely than non-cereal eaters to meet their requirements. For women who are pregnant or breastfeeding, these figures would become significantly more pronounced if factored that their nutrient requirements increase. Given these findings of women's current nutrient intakes, General Mills believes that for WIC women to achieve a healthy nutritional status that will result in healthy birth outcomes and healthy physical and cognitive development of their children, the program should continue to offer foods to address iron, calcium and vitamin C. General Mills strongly encourages that the WIC program consider folic acid and zinc as target nutrients for this WIC population.

III. WIC package to have a positive effect on addressing overweight concerns (Question 5)

The proportion of women and children in our nation that are overweight or obese is growing and this is particularly an issue within the WIC program. The rise in obesity raises questions as to how WIC may improve its efforts to confront this growing issue. The WIC program, through nutrition education initiatives has the opportunity to teach a lifetime of good eating habits, among these is breakfast consumption. General Mills strongly believes that the promotion of eating a balanced breakfast, like a cereal breakfast and the encouragement of physical activity are approaches that the WIC program can undertake to address overweight.

The consumption of cereal is associated with healthier body weight. A recent study examined the impact of breakfast and cereal consumption on the diets, nutrient intake and Body Mass Index (BMI) of WIC eligible women and children (10). Results from this study show:

- Women and children who frequently eat cereal (8+ times per 2 weeks) have a lower Body Mass Index (BMI) than non- or infrequent cereal eaters.
- Women and children who frequently eat cereal are less likely to be overweight or obese, or at risk for overweight.

Other benefits of eating fortified cereal among the WIC eligible population include:

- Women and children who eat cereal are less likely to skip breakfast as those who do not eat cereal.
- Women and children who eat cereal have a lower fat and cholesterol intakes at breakfast and throughout the day than those who choose other breakfast options, and meet more of the recommended vitamin and mineral levels.
- Children who eat cereal consume more of the recommended servings of milk and dairy products than children who don't eat ready-to-eat cereal.
- Children who eat cereal consume more of the recommended servings of grains, including whole grains, than non-cereal eaters

In addition, individuals who have the greatest success at maintaining weight loss consume a high carbohydrate, low fat diet and frequently eat cereal for breakfast (11). Approximately 60% of the successful weight loss maintainers reported to making a habit of eating cereal for breakfast. Thus, individuals attempting to lose weight and/or maintain weight loss may benefit more from including cereal as part of their diet regimen.

CDC analysis of NHANES III data indicated that foods provided by WIC are not associated with increased overweight among preschool-aged children (12). These findings suggest that WIC foods including cereal provide necessary nutrients without contributing to overweight. Childhood obesity is a complex problem and prevention will require many different approaches. The scientific community emphasizes the role of physical activity and avoiding restrictive approaches to eating for children. General Mills recognizes the importance of healthy lifestyles and will support and advocate for comprehensive solutions addressing obesity.

IV. Other concerns that affect foods issued through the WIC food packages that should be considered-food allergies (Question 6)

General Mills as part of the food industry has taken numerous steps over the past several years to address the needs of food allergic consumers, including improving labeling standards and implementing changes to manufacturing processes to reduce the potential for cross contact with major food allergens. General Mills supports the provision of offering options to WIC participants who are not able to consume certain foods for allergen reasons. While strict avoidance of the allergy-causing food is the only way to avoid a food allergic reaction, eligible WIC cereals offer a variety of grain options to allow for participants to simultaneously address food allergies and a key health issue - iron deficiency anemia.

V. What data and/or information should the Department consider in making decisions regarding the WIC food package (Question 7)

General Mills proposes that the Department consider the use of dietary intake research as essential to address the nutrition needs of the WIC population. The continuous collection of data on food consumption and health status indicators is critical for making public health decisions, especially related to food assistance programs that target individuals with special nutritional needs. Knowledge of dietary patterns, and eating behavior and choices enables the creation of effective nutrition interventions and programs. After all, reduced satisfaction with the WIC food

package would reduce WIC participation, compromising the ability of the program to achieve its goal of enhanced nutrition.

In addition, General Mills also proposes that the Department consider consumer research as a decision-making tool regarding the food package. Consumer research can supply accurate information about consumer behavior and allow the Department to understand the food acceptance criteria used by WIC clients. The use of consumer research leads to a strong understanding of attitudes, perceptions, and beliefs of consumers. As a result, WIC would be superiorly positioned to develop better food offerings and make sure that nutrition information and messages are delivered in a way that WIC clients can understand and use, thereby better executing its mission. The knowledge gained from consumer research can also help WIC health professionals better understand their target audience so that customized, actionable advice can be provided that would enable the behavior changes WIC wants to achieve. To the extent that the Department can better understand the WIC population, it can direct its efforts towards changes that can play an important role in helping develop informed regulatory decisions.

VI. Participants allowed greater flexibility in choosing among authorized food items (Question 8)

To ensure that participants receive the prescriptive food package that meet their nutritional needs, participant should not be allowed greater flexibility in choosing among authorized food items, except within a food category. Food packages are designed to supplement each participant's diet with foods that target nutrients typically lacking in the diet. By allowing participants greater flexibility in choosing among authorized food items, WIC might undermine its prescriptive and established nutritional criteria and as a result run the risk of compromising the nutritional health of its participants. Since the program inception, WIC's responsibilities include developing risk criteria, nutrition assessment standards and procedures, protocols and educational tools, and establishing prescriptive food packages and determining foods to be authorized for WIC participants to purchase. However, food flexibility should be allowed within a food category. Broad choice within a product category offers ample food options and the opportunity for WIC participants to select and enjoy the products in the food package, thereby ensuring consumption, and fostering client participation and satisfaction.

VII. WIC food package designed to meet nutritional needs in culturally and ethnically diverse communities (*Question 9*)

General Mills is cognizant of the increasing ethnic and cultural diversity in the WIC program. General Mills believes that the WIC food package should find ways to address cultural differences while bearing in mind its mission of delivering target nutrients through food as the vehicle and assisting participants in establishing healthful dietary practices that can be maintained to promote life-long nutritional health. One of the ways the WIC food package is currently designed to deal with this concern is through the offering of cereal. Cereal, in addition to delivering iron, also has multi-cultural appeal, has broad consumption and is widely available. In fact, there is nothing as nutritionally and culturally similar to cereal that delivers an equivalent amount of iron.

Consumer research shows that almost everyone eats cereal (13, 14). Cereal household penetration of cereal is 98% for general populations, 91% for African Americans and Asians and 96% for Hispanics. In addition, 92% of cereal is consumed at breakfast and the remaining 8% at other times of the day, thus establishing that cereal is a breakfast food yet versatile enough to be consumed throughout the day. Within the cereal category there is a wide selection of cereal varieties. This variety facilitates and allows for consumer preference and therefore most people can easily consume cereal.

NHANES 1999-2000 data shows that nutrient intakes of Hispanic children aged 2 to 5 years in the U.S. is similar to nutrient intakes of children aged 2 to 5 years in the total population. Similar trends are seen in the percentage of children who consume below the recommended level for iron, calcium, vitamin C, zinc and folate (See NHANES data described in section II). This data illustrates that there are similar nutritional needs in ethnically diverse communities and that the WIC food package can find ways to address cultural differences while bearing in mind its mission of delivering target nutrients through food. Case in point, keeping cereal as part of the WIC food package would help ensure the habit of eating breakfast among WIC participants. As a result, WIC participants would obtain the nutritional benefits of breakfast and cereal-both healthful dietary practices they can continue after leaving the program.

Opportunity for the program to address nutritional and cultural needs of the WIC community would be through the offering of soymilk. Soymilk serves as an alternative to milk for segments of the population who for either cultural or nutritional (allergies) cannot consume cow's milk. This point also relates to question 6.

VIII. Recommendation of food selection criteria (Question 11)

The WIC program ensures that women, infants and children from low-income families have access to nutritious foods and nutrition education during the most critical years of their nutritional life stage. The success of the program largely depends on nutrition education initiatives that are reinforced by the nutritious foods provided. General Mills continues to support this endeavor and advocates for the following food selection criteria:

Broad availability

The WIC program, in order to effectively meet its goal of improving the nutritional status of an at risk population, must take into account that food categories in the WIC food package should serve the broadest population possible. Policies and practices that overly restrict broad availability of prescribed foods may reduce the WIC participants' access to and consumption of these foods, ultimately leading to reduced participation and adverse health impacts. In addition, broad choice within a food category would enable individual WIC participants to find products that closely match their needs. Broad choice offers ample food options and the opportunity for WIC participants to select and enjoy the products in the food package, thereby ensuring consumption, and fostering client participation and satisfaction. In addition, broad availability mimics the general marketplace, thereby providing a teaching environment for WIC participants to learn how to make informed food choices while they are in the program and after they conclude the program.

General appeal

The WIC program, in order to effectively meet its goal of improving the nutritional status of an at risk population, must take into consideration that WIC consumers exhibit the same tastes, preferences and purchase behavior as the rest of the population. Consumers choose the products they will bring home based on national brand awareness. Brands are a valuable tool for consumers because they communicate product attributes that matter to consumers such as taste, convenience, nutrition and value. Consumers are most likely to feel loyalty to brands that differentiate themselves from the other brands within a specific category (15,16). Brands that are preferred by the general population are likely to also be preferred by the WIC population. Brand loyalty spans different demographic groups and behavioral characteristics, such as purchase behavior, the level of need, the benefits sought after and usage rate. Therefore foods in the WIC food package should have general appeal that is reflected in consumer demand. Foods that WIC consumers can resonate with and brands that they can trust are more likely to be selected and consumed. Policies and practices that hinder the principles of consumer behavior can compromise the ability of the WIC program to achieve its goal of nutritional improvement.

Nutrient density

The WIC program, in order to effectively meet its goal of improving the nutritional status of an at risk population, should design the WIC food package based on the nutrient density of the food item relative to its intended target nutrient. Authorizing legislation requires that the supplemental foods provided by WIC contain nutrients known to be lacking in the diets of the target population. The WIC food package is based on the delivery of target nutrients through food as the vehicle and assisting participants in establishing healthful dietary practices that can be maintained to promote life-long nutritional health. Allowing for nutrient dense foods to be part of WIC food package ensures that participants are choosing the most nutritious foods possible, that their nutritional needs are met and that the delivery of nutrients is cost effective.

An example of this concept is shown in the cereal category of the WIC food package. Cereal is offered to deliver iron to WIC participants. In addition, cereal, a nutrient dense food, provides essential nutrients for the health of women and children including calcium, and B-vitamins, folic acid and dietary fiber. Other grain products do not provide the same level of nutrition value per dollar. In fact, cereal is the most nutrient dense item in the food package (Reference Table 1-3).

General Mills appreciates the opportunity to participate in the regulatory process by providing our comments on this advanced notice of proposed rulemaking for the WIC food package. We welcome any questions that you may have pertaining tour comments and look forward to continued collaboration with USDA as this process continues.

Respectfully submitted,

Kathryn L. Wiemer, MS, RD, LD

Senior Manager

General Mills Bell Institute of Health and Nutrition

- Yip R, Binkin NJ, Fleshood L. and Trowbridge FL. Declining prevalence of anemia among low-income children in the United States. Journal of the American Medical Association. 1987; 258: 1619-1623
- 2. Bell Institute of Health and Nutrition. Dietary Intake Study. 1998-2000. Minneapolis, MN.
- 3. Centers for Disease Control and Prevention. Iron Deficiency-United States, 1999-2000. MMWR 2002; 51(40):897-899.
- 4. Subar, AF, Krebs-Smith, SM, Cook, A and Kahle, LL. Dietary Sources of Nutrients Among US Children, 1989-1991. Pediatrics, 102(4), October 1998, pp. 913-923.
- 5. General Mills Bell Institute of Health and Nutrition. American Breakfast Report. 1998
- 6. Minnesota Department of Children, Families and Learning, Food and Nutrition Service. Three Year Study of the Universal School Breakfast Pilot Program in Minnesota Elementary Schools. March 1998.
- 7. Bell Institute of Health and Nutrition. Dietary Intake Study. 1998-2000. Minneapolis, MN.
- 8. Smiciklas-Wright H, Mitchell DC, Mickle SJ, Cook AJ, Goldman JD. Foods Commonly Eaten in the United States-Quantities Consumed Per Easting Occasion and in a Day, 1994-96. U.S. Department of Agriculture, Agriculture Research Service. Continuing Survey of Food Intakes by Individuals, 1994-96. 1998.
- 9. Williams, RL, Hersey, J. Kavee et al. Adolescent WIC Participant Study Volume I: Final Report. Nutrition Assistance Program Report Series, No. WIC-02-ADOL, Project Officers; Anita Singh, Boyd Kowal. U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis, Nutrition and Evaluation, Alexandria, VA 2002.
- 10. U.S. Department of Health and Human Services. NHANES 1999-2000. Available at www.cdc.gov/nchs/data/nhanes/.
- 11. Albertson AM, GH Anderson, Crockett, SJ, Goebel, MT. Ready-to-eat cereal consumption: Its relationship with BMI and nutrient intake of children aged four to 12 years. J Am Diet Assoc 2003;103:1613.
- 12. Wyatt HR, Grunwald GK, Mosca CL, Klem ML, Wing RR and Hill JO. Long –term Weight Loss and Breakfast in Subjects in the National Weight Control Registry. Obesity Research. 2002; 10:78-82.

- 13. Centers for Disease Control and Prevention. Nutritional status of children participating in the Special Supplemental Nutrition Program for Women, Infants, and Children-United States, 1988-1991. MMWR 1996; 45(3):65-69.
- 14. National Panel Diary (NPD), 2001
- 15. AC Nielsen, 2003.
- 16. Grocery Manufactures of America/Roper Starch Report on National Brands. September 2000.
- 17. Grocery Manufactures of America/Roper Starch Report on National Brands. June 2002.

Table 1. Nutrient density of cereal compared to other grain products (WIC nutrients minus protein)

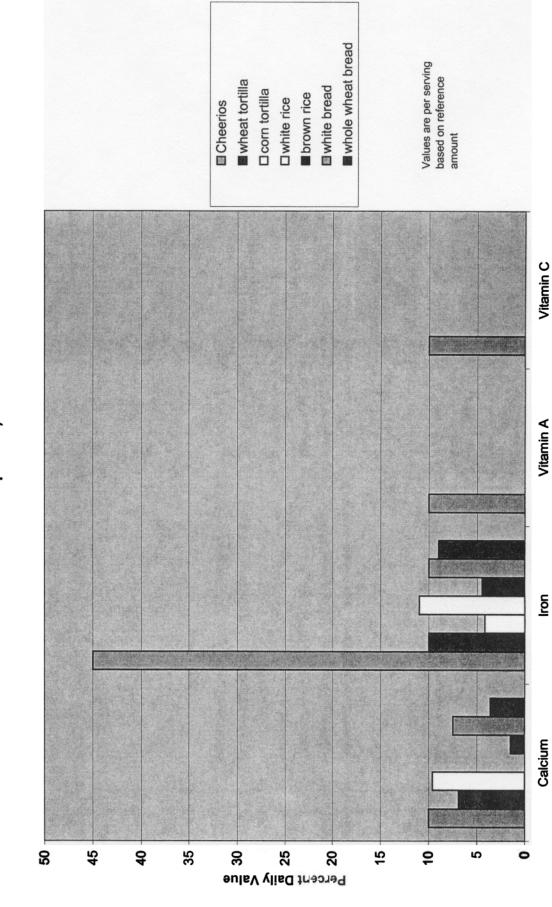
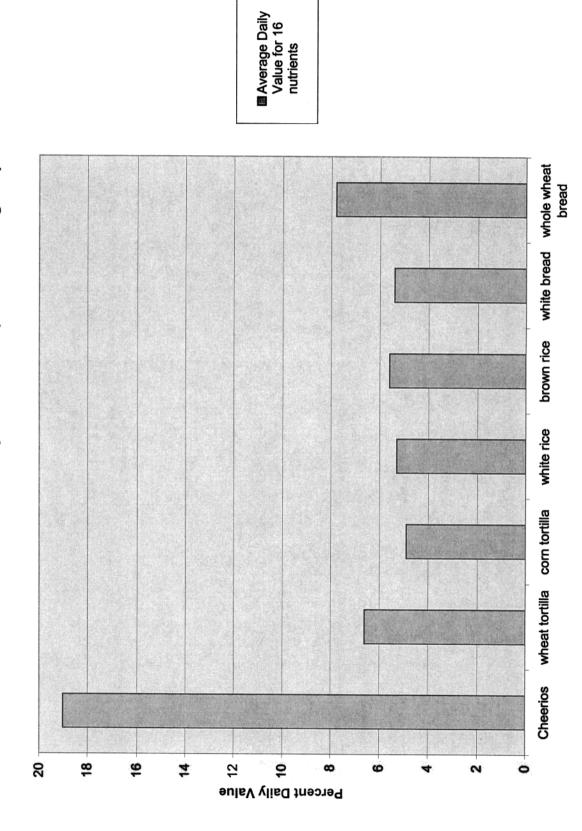
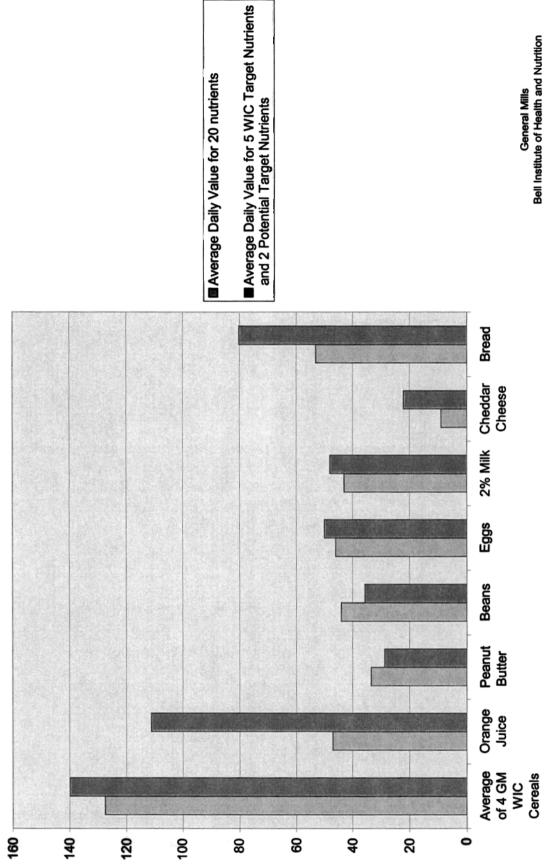


Table 2. Nutrient density of cereal compared to other grain products



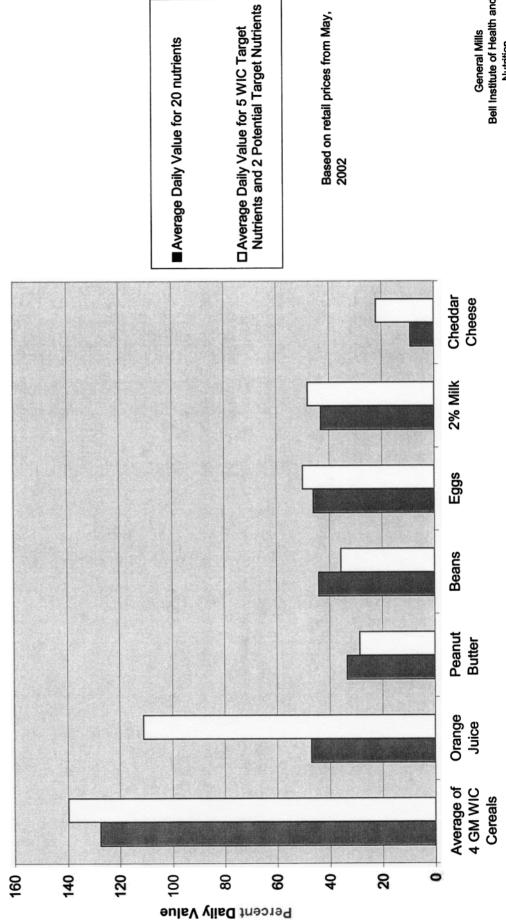
.

Table 3. Nutrient Density of Cereal per Dollar



Perecent Daily Value

Table 4. Nutrient Density of Cereal per Dollar



Bell Institute of Health and Nutrition General Mills